



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/586,056

06/11/2007

Elimelech Rochlin

27526U

2440

20529

7590

03/25/2008

NATH & ASSOCIATES
112 South West Street
Alexandria, VA 22314

EXAMINER

NWAONICHA, CHUKWUMA O

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

03/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,056	Applicant(s) ROCHLIN ET AL.	
	Examiner CHUKWUMA O. NWAONICHA	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57-104 is/are pending in the application.
- 4a) Of the above claim(s) 79-104 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57,58,60-63,66,70-75,77 and 78 is/are rejected.
- 7) ☒ Claim(s) 59,64,65,67-69 and 76 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Current Status

1. This action is responsive to Applicants' amendment of 6 February 2008.
2. Claims 57-104 are pending in the application.

Election/Restrictions

Applicant's election without traverse of Group 1 (claims 57-78) in the reply filed on 6 February 2008 is acknowledged. Applicants are reminded of their right to file divisional applications to the non-elected claims. Claims 79-104 are withdrawn from further consideration.

Applicants' are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

Applicants' claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 57, 66, 71-75, 77 and 78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 57, 66, 71-75, 77 and 78 are rejected because the claims recite "R² represents a hydrophobic group, Z represents a protecting group and X represents a leaving group", which are not properly defined in the specification. The metes and bounds of the claims are unclear. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

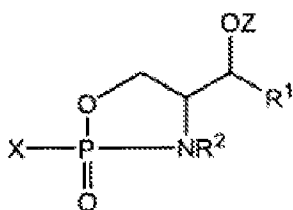
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 57, 58, 60-63, 66, 70-75, 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deigner et al., {Synthesis of [³²P] labelled 1-O-alkyl-2-desoxy-2-amino-*SN*-glycero-3-phosphocholines, JOURNAL OF LABELLED COMPOUNDS

Art Unit: 1621

AND RADIOPHARMCEUTICALS, vol. 34, no. 2, 1994, pages 185-190}, Deigner et al., (2) {Rapid synthesis of 2-desoxy-2-amino-3-phosphocholine-glycerinic-acid-alkylester, 1-alkyl-1-desoxy- and 1-o-alkyl-2-desoxy-2-amino-sn-glycero-3-phosphocholines,-3-phospho-N,N'-dimethylethanolamine and-3-phospho-Fmoc-serine-methylester, CHEMISTRY AND PHYSICS OF LIPIDS, vol. 61, 1992, pages 199-208}, or Lorene et al., {Synthesis of N-Lost derivatives. II. Reaction of N,N-bis(2-chloroethyl) phosphoramidic dichloride with 1-aminopropane-2,3-diol, ARCHIV DER PHARMAZIE (WEINHEIM, GERMANY) , 319(11), 1023-7, 1986}.

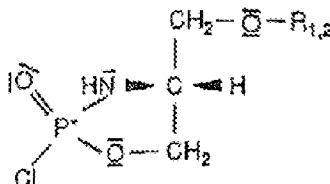
Applicants claim an oxazaphospholane compound of the general formula 1; wherein all the variables are as defined in the claims.



formula 1

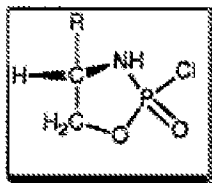
Determination of the scope and content of the prior art (M.P.E.P. §2141.01)

Deigner et al. teach a compound of the formula 2. See page 186.



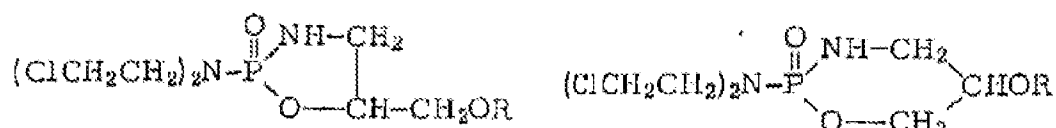
formula 2

Deigner et al. (2) teach a compound of the formula 3. See page 200.



formula 3

Lorene et al. teach the compounds of the formula 4. See page 1025.



formula 4

Ascertainment of the difference between the prior art and the claims (M.P.E.P., §2141.02)

Applicants claimed the oxazaphospholane compound of the general formula 1 differs from the teaching of the prior art references in that the instantly claimed compound of the general formula 1 is a homolog of the prior arts compounds.

Finding of prima facie obviousness--rational and motivation (M.P.E.P., §2142-2143)

The instantly claimed oxazaphospholane compounds of the general formula 1 would have been suggested to one of ordinary skill because one of ordinary skill wishing to obtain the oxazaphospholane compounds of the general formula 1 is taught to select the compounds of Deigner et al., Deigner et al. (2) or Lorene et al.

One of ordinary skill in the art would have a reasonable expectation of success in practicing the instant invention by varying the substituents on the oxazaphospholane ring to arrive at the instantly claimed oxazaphospholane compounds. Said person

would have been motivated to practice the teaching of the reference cited because of the physicochemical and biological properties of oxazaphospholane compounds. Additionally, the prior arts compounds are homologs of the claimed compounds of the general formula 1, and homologs are obvious. The instantly claimed invention would therefore have been obvious to one of ordinary skill in the art.

Allowable Subject Matter

Claims 59, 64, 65, 67-69 and 76 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne (Bonnie) Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1621

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/YVONNE L. EYLER/

Supervisory Patent Examiner, Art Unit 1621

/Chukwuma O. Nwaonicha/

Examiner, Art Unit 1621